

The invention claimed is:

Sub A1

1. A method for managing a profile service, the method comprising:

storing at least one true-data attribute in a profile object, said true-data attribute includes a true-data key and at least one true-data value field;

associating at least one meta-data attribute with said true-data attribute, said meta-data attribute includes a meta-data key and at least one meta-data value field;

10 storing said associated meta-data attribute; and

managing said true-data attribute according to said associated meta-data attribute.

2. The method as defined in claim 1, wherein the method further includes indicating in said meta-data attribute an access privilege of said true-data attribute.

3. The method as defined in claim 1, wherein the method further includes indicating in said meta-data attribute an owner of said true-data attribute.

4. The method as defined in claim 1, wherein the method further includes indicating in said meta-data attribute a group of said true-data attribute.

5. The method as defined in claim 1, wherein the method further includes indicating in said meta-data attribute a creation time of said true-data attribute.

6. The method as defined in claim 1, wherein the method further includes indicating in said meta-data attribute a update time of said true-data attribute.

7. The method as defined in claim 1, wherein the method further includes indicating in said meta-data attribute a expiration time of said true-data attribute.

8. The method as defined in claim 7, wherein the method further includes:

identifying said true-data attribute with said expiration time beyond a profile service time; and

5 deleting said identified true-data attribute from said profile object.

9. The method as defined in claim 1, wherein the method further includes indicating in said meta-data attribute at least one trigger location of said true-data attribute.

10. The method as defined in claim 1, wherein the method further includes indicating in said meta-data attribute a binding flag of said true-data attribute.

11. The method as defined in claim 1, wherein the method further includes indicating in said meta-data attribute an assurance level of said true-data attribute.

12. The method as defined in claim 1, wherein the method further includes identifying said meta-data attribute information by a prefix field in said meta-data value field.

13. The method as defined in claim 1, wherein the method further includes:

associating at least one profile level meta-data attribute to said profile object;

5 storing said profile level meta-data attribute; and
managing said profile object according to said associated profile meta-data attribute.

14. The method as defined in claim 13, wherein the method further includes indicating in said profile level meta-data attribute at least one template resource ID of said profile object.

15. The method as defined in claim 13, wherein the method further includes indicating in said profile level meta-data attribute an object class of said profile object.

16. The method as defined in claim 13, wherein the method further includes indicating in said profile level meta-data attribute an object ID of said profile object.

17. The method as defined in claim 13, wherein the method further includes indicating in said profile level meta-data attribute a binding resource ID of said profile object.

~~SUB A27~~ 18. A profiling service for accessing user data, said profiling service comprising:

a plurality of profile objects;

at least one true-data attribute contained in each

5 of said profile objects, said true-data attribute includes a true-data key and at least one true-data value field;

at least one meta-data attribute associated to said true-data attribute, said meta-data attribute includes a 10 meta-data key and at least one meta-data value field; and

methods within each profile object to access the user data according to said meta-data attribute.

19. The profile service of claim 18, wherein said true-data attribute comprises the user data.

20. The profile service of claim 18, wherein said true-data attribute comprises an external reference to the user data.

21. The profile service of claim 18, further comprising at least one true-data attribute binding to another one of said profile objects.

22. The profile service of claim 18, wherein said meta-data attribute is identified with a prefix field in said meta-data value field.

23. The profile service of claim 18, wherein said meta-data key is equated with said true-data key.

24. The profile service of claim 18, further comprising methods within said profile objects to read and write said true-data attribute.

25. The profile service of claim 18, further comprising methods within said profile objects to read and write said meta-data attribute.

26. The profile service of claim 18, further comprising methods within the profiling service to set an owner of said true-data attribute.

27. The profile service of claim 18, further comprising methods within said profile objects to set an access privilege of said true-data attribute.

28. The profile service of claim 18, further comprising methods within said profile objects to set a group of said true-data attribute.

29. The profile service of claim 18, further comprising methods within said profile objects to set a creation time of said true-data attribute.

30. The profile service of claim 18, further comprising methods within said profile objects to set a update time of said true-data attribute.

31. The profile service of claim 18, further comprising methods within said profile objects to change a expiration time of said true-data attribute.

32. The profile service of claim 31, further comprising methods within said profile objects to delete said true-data attribute with said expiration time beyond a profile service time.

33. The profile service of claim 18, further comprising methods within said profile objects to set a trigger location of said true-data attribute.

34. The profile service of claim 18, further comprising methods within said profile objects to set a binding flag of said true-data attribute.

35. The profile service of claim 18, further comprising methods within said profile objects to set an assurance level of said true-data attribute.

36. The profile service of claim 18, further comprising at least one profile level meta-data attribute.

37. The profile service of claim 36, further comprising methods within said profile objects to set a template resource ID of said profile object.

38. The profile service of claim 36, further comprising methods within said profile objects to set an object class of said profile object.

39. The profile service of claim 36, further comprising methods within said profile objects to set an object ID of said profile object.

40. The profile service of claim 36, further comprising methods within said profile objects to set a binding resource ID of said profile object.

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~~41. A profiling service for accessing user data, said profiling service comprising:~~

~~means for storing at least one true-data attribute in a profile object, said true-data attribute includes a 5 true-data key and at least one true-data value field;~~

~~means for associating at least one meta-data attribute with said true-data attribute, said meta-data attribute includes a meta-data key and at least one meta-data value field;~~

~~10 means for storing said associated meta-data attribute; and~~

~~means for managing said true-data attribute according to said associated meta-data attribute.~~

42. A profile object for maintaining client configuration data in a hierarchical fashion, the profile object comprising:

~~5 at least one true-data attribute in the profile object, said true-data attribute includes a true-data key and at least one true-data value field; and~~

~~at least one meta-data attribute associated to with said true-data attribute, said meta-data attribute includes a meta-data key and at least one meta-data value 10 field.~~

43. The profile object of claim 42, wherein said meta-data attribute specifies an access privilege of said true-data attribute.

44. The profile object of claim 42, wherein said meta-data attribute specifies a expiration time of said true-data attribute.

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45. The profile object of claim 42, further including an aging method for deleting said true-data attribute with said expiration time beyond a profile service time.

46. The profile object of claim 42, wherein said meta-data attribute specifies a binding flag of said true-data attribute.

47. The profile object of claim 42, further including at least one profile level meta-data attribute associated to the profile object.

48. A computer program product comprising:
a computer usable medium and computer readable code embodied on said computer useable medium for causing the managing of a profile service, the computer readable code 5 comprising:

computer readable program code configured to cause the computer to effect the storing of at least one true-data attribute in a profile object, said true-data attribute includes a true-data key and at least one true-data value field;

10 computer readable program code configured to cause the computer to effect the associating of at least one meta-data attribute with said true-data attribute, said meta-data attribute includes a meta-data key and at least one meta-data value field, wherein said meta-data key is 15 equated with said true-data key;

computer readable program code configured to cause the computer to effect the storing of said associated meta-data attribute; and

20 computer readable program code configured to cause the computer to effect the managing of said true-data attribute according to said associated meta-data attribute.

49. A computer program product embodied in a tangible media comprising:

computer program devices readable by a data processor coupled to the tangible media for managing a plurality of profile data structures, each profile data structure comprising a hierarchical structure of true-data attributes and meta-data attributes, the computer program product comprising:

10 first program code devices configured to cause the data processor to store said true-data attributes in said profile data structures, said true-data attributes include a true-data key and at least one true-data value field;

15 second program code devices configured to cause the data processor to associate said meta-data attributes with said true-data attributes, said meta-data attributes include a meta-data key and at least one meta-data value field, wherein said meta-data key is equated with said true-data key;

20 third program code devices configured to cause the data processor to store said associated meta-data attribute; and

forth program code devices configured to cause the data processor to manage said true-data attributes according to said associated meta-data attributes.

50. The computer program product of claim 49 wherein the tangible media comprises a magnetic disk. /

51. The computer program product of claim 49 wherein the tangible media comprises an optical disk. /

52. The computer program product of claim 49 wherein the tangible media comprises a propagating signal.

53. The computer program product of claim 49
wherein the tangible media comprises a random access
memory device.